

REMARKS

The removal of the previous grounds of rejection is acknowledged with appreciation. Reexamination and reconsideration of the claims 10, 12, 13, 15-20, 22-27, and 29-31 is respectfully requested. Additionally, the allowance of claims 1-9 and 28 is acknowledged. Claims 11, 14, and 21 have been previously cancelled without prejudice.

Claims 23, 24, and 27 were rejected under 35 U.S.C. sec. 103(a) applying U.S. Pat. No. 6,445,859 (the '859 patent) in view of U.S. Pat. No. 4,684,214 (the '214 patent). For patents to be applicable under sec. 103(a), the combination of teachings must, *inter alia*, expressly or inherently, teach, disclose, or suggest each and every feature of the claimed invention. Additionally, motivation and suggestion to combine the patents must be present.

It is respectfully submitted that the purported modification does not make a *prima facie* case of obviousness with respect to claims 23, 24, and 27. First, the purported modification does not teach, disclose, or otherwise suggest each and every feature of independent claim 23. Moreover, the Office Action acknowledges that the purported modification does not teach, disclose, or otherwise suggest each and every feature of independent claim 23. Specifically, p. 3 of the Office Action states:

Though Goldmann [the '214 patent] coats an outer jacket rather than a binder element, one skilled in the art would readily recognize that such materials would be suitable for other parts of an optical fiber cable that need to move freely, and therefore minimize damage due to wear and abrasion.

Simply stated, there is absolutely no objective evidence of record that the skilled artisan would make the purported modification and arrive at independent claim 23. If the skilled artisan were to make the purported modification he would have applied the teaching of the '214 patent and applied a wax layer

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to the outer sheath 40 of the '859 patent. See the Abstract of the '214 patent. The '214 patent merely teaches applying a thin wax layer to an exterior surface of an outside jacket AM so that the cable can be pulled for greater lengths in pipes, conduit, or the like. See Col. 2, ll. 50-61 of the '214 patent. Nothing more of relevance is taught, disclosed, or otherwise suggested by the '214 patent. Thus, for at least this reason the Office Action has failed to make a *prima facie* case of obviousness because the purported modification fails to reasonably teach, disclose, or otherwise suggest each and every feature of independent claim 23.

Second, the skilled artisan would have been motivated not to make the purported modification as asserted for several reasons that the Office Action never considers. The Response to Arguments section at p. 11 of the Office Action states the following:

Which part is coated doesn't matter. The teachings provide a reasonable suggestion to the skilled artisan that a silicone-based material is a useful material to coat binder elements/threads in an optical fiber cable in order to improve cable performance by reducing frictional wear between the binder and the optical fibers with a reasonable expectation of success.

Contrary to the position in the Office Action, it would have mattered a great deal to the skilled artisan where a silicone wax emulsion finish is applied. This is because applying a wax solution can cause problems or inhibit the intended performance.

For instance, the skilled artisan would not have applied a silicone wax emulsion finish to tape 30 of the '859 patent because it would have hindered, or rendered inoperable, the water blocking characteristic of tape 30. Specifically, tape 30 is impregnated or coated with a powder that swells when wetted. See Col. 4, ll. 38-46 of the '859 patent. Simply stated, the skilled artisan would not have been motivated, nor taken a suggestion, to place a wax finish on tape 30 because it would have covered the

water-swellaable powder making it ineffective, or inoperable, for its intended purpose. The fact of the matter is that skilled artisan would have been motivated not to make the purported modification in order to maintain the water-blocking characteristic of tape 30. Moreover, the '214 patent does not teach, disclose, or otherwise suggest blocking water in any other manner.

As an independent basis, the skilled artisan would have been motivated to increase the friction between tape 30 and the sheath's inner diameter 120 of the '859 patent; rather than to decrease the friction of tape 30 as in the purported modification. Specifically, the skilled artisan would have been motivated to increase the friction of tape 30 because the cable core (tape 30 and optical assemblies 20) of the '859 patent is loosely disposed within the sheath. See Figs. 3A-5 and Col. 2, ll. 56-60 of the '859 patent. In other words, coupling of the cable core and sheath is desirable.

The skilled artisan would have understood that there should be sufficient coupling between the cable core and the sheath so that the cable core is not unduly displaced longitudinally along the cable, for instance, during a pulling installation, cable dig-ups, or the like. As discussed in the '214 patent, "[t]he construction of the cable core KS can include a filling compound for achieving longitudinal tightness..." See Col. 2, ll. 44-46 of the '214 patent. In other words, having the cable core move freely, or not having enough friction between the cable core and sheath, would have caused performance problems. Furthermore, because tape 30 and optical tube assemblies 20 of the '859 patent are loosely disposed within cable sheath 40 friction therebetween would have been even more critical so that the cable core not does move freely. See the '859 patent at Col. 2, ll. 45-46. Thus, the skilled artisan would not have been motivated to decrease the friction between tape 30 and sheath 40 as in the

purported modification. Rather, the skilled artisan would have been concerned about having enough friction for cable core coupling with the sheath. For at least the reasons stated, the Office Action failed to make a *prima facie* case of obviousness. For at least this reason, the withdrawal of the sec. 103(a) rejection of claims 23, 24, and 27 is warranted and respectfully requested.

Claims 10, 12, 13, 15, 25 and 26 were rejected under 35 U.S.C. sec. 103(a) applying the '859 and '214 patents in view of U.S. Pat. No. 5,165,003 ('003). For patents to be applicable under sec. 103(a), the combination of teachings must, *inter alia*, expressly or inherently, teach, disclose, or suggest each and every feature of the claimed invention. Additionally, motivation and suggestion to combine the patents must be present.

Regarding claims 25 and 26, the claims are allowable for at least the reasons discussed above.

Regarding claims 10, 12, 13 and 15, it is respectfully submitted that the purported modification does not teach each and every feature of independent claim 10. As stated above, there is absolutely no objective evidence of record that the skilled artisan would make the purported modification and arrive at independent claim 10. If the skilled artisan were to make the purported modification he would have applied the teaching of the '214 patent and applied a wax layer to the outer sheath 40 of the '859 patent. See the Abstract of the '214 patent. The '214 patent merely teaches applying a thin wax layer to an exterior surface of an outside jacket AM so that the cable can be pulled for greater lengths in pipes, conduit, or the like. See Col. 2, ll. 50-61 of the '214 patent. The objective evidence of record does not suggest anything else of relevance. Moreover, no text, Figures, or other objective evidence of record is cited for supporting the position of the Office Action. Thus, for at least this reason the Office Action has failed to make a *prima facie*

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case of obviousness because the purported modification fails to reasonably teach, disclose, or otherwise suggest each and every feature of independent claim 10.

Additionally, the Office Action misinterpreted the present invention. Page 11 of the Office Action states it is useful to coat binder threads in order to improve cable performance by reducing frictional wear between the binder and the optical fibers. This is incorrect. As discussed in the last Reply, threads having a silicone wax emulsion finish aid in the manufacturing process. See p. 9 of Applicants' Reply dated June 3, 2004. Frictional wear between the binder and the optical fibers is not an issue, thus, it would not be a motivation for the skilled artisan. For at least these reasons, the withdrawal of the sec. 103(a) rejection of claims 10, 12, 13, 15, 25, and 26 is warranted and respectfully requested.

Claims 16 and 22 were rejected under 35 U.S.C. sec. 103(a) applying the '859 and '214 patents in view of U.S. Pat. No. 5,345,526 (the '526 patent). For patents to be applicable under sec. 103(a), the combination of teachings must, *inter alia*, expressly or inherently, teach, disclose, or otherwise suggest each and every feature of the claimed invention. Additionally, motivation and suggestion to combine the patents must be present.

For at least the reasons stated above, the Office Action failed to make a prima facie case of obviousness with respect to claims 16 and 22. For the sake of brevity, the arguments will not be restated. For at least these reasons, the withdrawal of the sec. 103(a) rejection of claims 16 and 22 is warranted and respectfully requested.

Claims 17-20 were rejected under 35 U.S.C. sec. 103(a) applying the '859, '214, and '526 patents in view of the '003 patent. For at least the reasons stated above with respect to claim 16, withdrawal of the sec. 103(a) rejection of claims 17-20 is warranted and is respectfully requested.

Claim 29 was rejected under 35 U.S.C. sec. 103(a) applying the '859, '214 and '003 patents in view of U.S. Pat. No. 6,167,178 ('178). For at least the reasons stated above with respect to claim 10, withdrawal of the sec. 103(a) rejection of claim 29 is warranted and is respectfully requested.

Claim 30 was rejected under 35 U.S.C. sec. 103(a) applying the '859, '214, and '526 patents in view of the '178 patent. For at least the reasons stated above with respect to claim 16, withdrawal of the sec. 103(a) rejection of claim 30 is warranted and is respectfully requested.

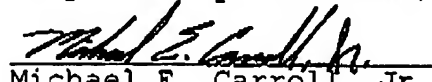
Claim 31 was rejected under 35 U.S.C. sec. 103(a) applying the '859 and '214 patents in view of the '178 patent. For at least the reasons stated above with respect to claim 23, withdrawal of the sec. 103(a) rejection of claim 31 is warranted and is respectfully requested.

No new fees are believed due in connection with this Reply. If any fees are due in connection with this Reply, please charge any fees, or credit any overpayment, to Deposit Account Number 19-2167.

Allowance of all pending claims is believed to be warranted and is respectfully requested.

The Examiner is welcomed to telephone the undersigned to discuss the merits of this patent application.

Respectfully submitted,

  
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